

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/507,007	OGAWA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	ARADHANA SASAN	1615	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Appeal Brief filed on July 31, 2009 and telephonic interview conducted on 11/23/09.
2. ☒ The allowed claim(s) is/are 1-7,9-12 and 14-22.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).  
\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.  
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached  
1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.  
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.  
**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application  |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date <u>20091123</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment  |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance                         |
|  | 9. <input type="checkbox"/> Other _____.   |

/Aradhana Sasan/  
Examiner, Art Unit 1615

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Christopher Korff on November 23, 2009. Please see attached Interview Summary Form PTOL-413 (Paper No. 20091123).

2. The application has been amended as follows:

**Replace the text of claim 1 with the following:**

**Claim 1. (Amended)**

A composite powder comprising:

- a) a flaky substrate powder,
- b) seed particles selected from the group consisting of titanium oxide, zinc oxide, alumina, aluminum hydroxide, silica, iron oxide; and
- c) barium sulfate particles or zinc oxide particles;

wherein

- i) the seed particles act as nuclei on the surface of the flaky substrate powder and the barium sulfate particles or the zinc oxide particles adhere to the flaky substrate powder particles through the seed particles, and
- ii) the coverage with barium sulfate particles is 10-70% with respect to the surface area of said substrate powder or the coverage with zinc oxide particles is 40-90% with respect to the surface area of said substrate powder.

Art Unit: 1615

**Replace the text of claim 16 with the following:**

**Claim 16. (Amended)**

A method of producing a composite powder comprising a flaky substrate powder, seed particles and adhering barium sulfate particles comprising the steps of:

- a) preparing a slurry solution of a flaky substrate powder,
- b) separately preparing a solution of seed particles,
- c) adding the solution of seed particles to the slurry solution of the flaky substrate powder,
- d) separately preparing a barium ion solution,
- e) separately preparing a sulfate ion solution,
- f) adding the barium ion solution and the sulfate ion solution separately to the slurry solution comprising seed particles and the flaky substrate powder,
- g) allowing the barium ion solution and the sulfate ion solution to react and form barium sulfate particles;

wherein

- i) the seed particles act as nuclei, and
- ii) the barium sulfate particles adhere to the flaky substrate powder particles through the seed particles.

Art Unit: 1615

**Replace the text of claim 17 with the following:**

**Claim 17. (Amended)**

A method of producing a composite powder comprising a flaky substrate powder, seed particles and adhering zinc oxide particles comprising the steps of:

- a) preparing a slurry solution of a flaky substrate powder,
  - b) separately preparing a solution of seed particles,
  - c) adding the solution of seed particles to the slurry solution of the flaky substrate powder,
  - d) separately preparing a zinc ion solution,
  - e) separately preparing an alkali aqueous solution,
  - f) adding the zinc ion solution and the alkali aqueous solution separately to the slurry solution comprising seed particles and the flaky substrate powder,
  - g) allowing the zinc ion solution and the alkali aqueous solution to react and form zinc oxide particles;
- wherein
- i) the seed particles act as nuclei, and
  - ii) the zinc oxide particles adhere to the flaky substrate powder particles through the seed particles.

***Reasons for Allowance***

3. The following is an examiner's statement of reasons for allowance: Applicant's representative approved the examiner's amendment of claims 1, 16 and 17 to outline the specific limitations of seed particles, the adherence of barium sulfate or zinc oxide on a flaky substrate powder through the seed particles such that the coverage with barium sulfate particles is 10-70% with respect to the surface area of said substrate powder or the coverage with zinc oxide particles is 40-90 % with respect to the surface area of the flaky substrate powder. The reference Watanabe et al. (US 4,603,047) discloses covering a flaky substrate powder with BaSO<sub>4</sub> or ZnO, however, the coverage of this flaky substrate powder is uniform, i.e., 100% coverage. Watanabe does not disclose adherence of BaSO<sub>4</sub> or ZnO on the flaky substrate powder that is non-uniform, or coverage with barium sulfate particles that is 10-70% with respect to the surface area of said substrate powder, or the coverage with zinc oxide particles that is 40-90% with respect to the surface area of the flaky substrate powder. Watanabe does not disclose the adherence of BaSO<sub>4</sub> or ZnO to the flaky substrate powder through seed particles.

Therefore, the claimed invention is novel and patentably distinct over the prior art of record.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 1615

***Conclusion***

5. Claims 1-7, 9-12, 14-22 are allowed.
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aradhana Sasan whose telephone number is (571) 272-9022. The examiner can normally be reached Monday to Thursday from 6:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert A. Wax, can be reached at 571-272-0623. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Aradhana Sasan/  
Examiner, Art Unit 1615

/Robert A. Wax/  
Supervisory Patent Examiner, Art Unit 1615